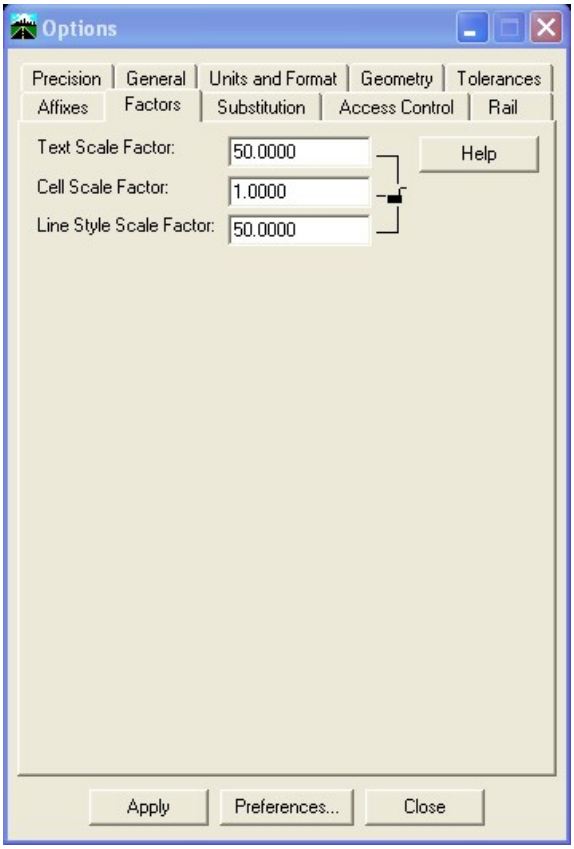
Graphical Scaling with InRoads SP 4

When Using InRoads Survey

Inroads Service Pack 4 has solved several problems that have plagued InRoads since the release of Service Pack 1. The Cabinet decided it best to stay with Service Pack 1 due to a sizable issue with scaling graphics in InRoads Survey that did not have a practical workaround. With the release of Service Pack 4 (SP 4), Bentley has corrected the previous issue of scaling custom line styles when generating graphics. However, in the process, the behavior of scaling on text and cells has changed. This inconsistency has been reported to Bentley; however, in the meantime, we must take care when generating graphics from survey data to ensure the proper scaling. The following is a short guide to using InRoads Survey with SP 4 to generate a design file at the appropriate scale.

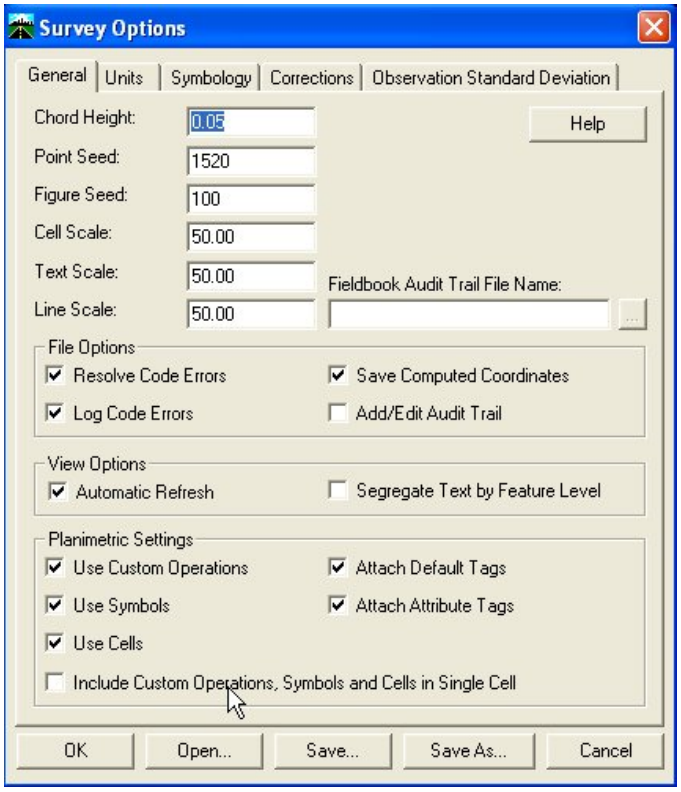
There are two ways to set a **Cell, Text and Line Style scale** within InRoads. The main scaling component for InRoads is known as ***Global Scale Factors*** and can be found in two places. One location is in the **Tools>Options** dialog box. On the ***Factors*** tab, the three scale factors (Cell, Text and Line Style) can be set to control graphics generated by InRoads commands.



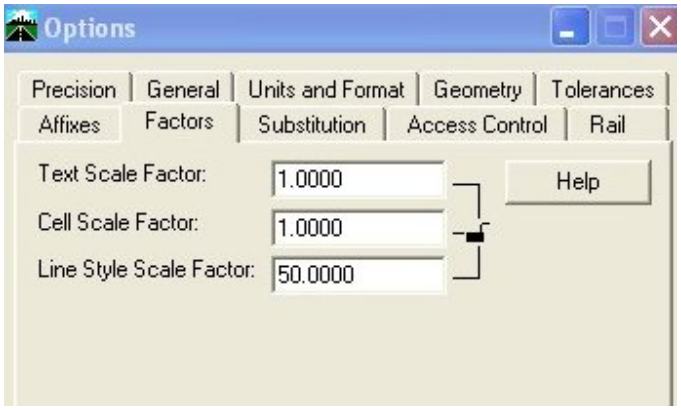
The scale factors to the left will control how the individual elements are displayed using InRoads commands such as Stationing, Annotate Horizontal Alignment, Create Cross Sections, etc. As you can see, they can be set independently of one another, which can be useful if using Storm & Sanitary to do your drainage design. But these factors are for displaying cells, text and graphics in the design file using InRoads information.

Also, these same scale factors can be accessed by initializing an Application Add-in called ***Global Scale Factors Add-in***, which places a command at the bottom of the Tools pull-down menu. This is just a short-cut to reaching the same set of Scale Factors as shown to the left.

The other set of scale factors are found within the InRoads Survey Options. Under Tools>Survey Options, you can find a tab named **General**, which contains various fields, three of which are cell, text and line scale factors.



These scale factors are supposed to function only with InRoads Survey. They are used to control the scale of the "virtual" graphics, graphics which are not written into the design file. Once the user decides to create graphics for the survey data set, they must use the Survey>View Survey Data>Write Survey Data To Graphics command. In doing so, the scale that the drawing is created at this time should be dictated by the **Global Scale Factors** discussed above. However, this is **NOT** the case. In order to properly generate graphics in the design file, please remember the following: **Set the Global Scale Factors for Text and Cells to a scale of 1.** Line styles are scaled according to what is set in the Line Style Scale entry box. However, as shown below, in order to get the appropriate scale for text and cells, set the appropriate scale factors to 1.



Apparently, the scale factors shown here and the ones above for text and cells are being multiplied together. The issue has been reported to Bentley; however, until another fix is released, please keep these steps in mind to generate drawings at the appropriate scale.